

## REMARKS

Claims 1-15 are cancelled herein without prejudice or disclaimer, and claims 31-40 are new. Basis for the new claims is in the claims as originally filed and in the specification. For example, claims 1, 2, 3, 5, 7 and 8 as originally filed, and paragraphs 0079, 0098, 0099, 00104, 00105, 00136, 00164 and 00173 in the specification, provide basis for the new claims. Thus, entry of claims 31-40 introduces no prohibited new matter.

### Species Election

Applicants acknowledge that a search of positions 9182 and 7328 in SEQ ID NO: 1 was performed. The Office stated on page 3 of the action that oligonucleotide sequences of SEQ ID NO: 38, 40, 61 and 62 in original claim 7 are deemed distinct species. Subject matter of original claim 7, now cancelled, is in new claim 39. Applicants elect the oligonucleotide sequence species of SEQ ID NO: 38 for examination of new claim 39.

### Objections to the Specification

The Office objected to the specification on the basis that it allegedly contains impermissible hyperlinks or other forms of browser-executable code. MPEP 608.01 defines hyperlinks and other forms of browser-executable code as URL information placed between “<>” or following “http://” text. Applicants have reviewed the specification and note that URL information follows the term “http address” rather than “http://” text, which is permissible since the URL should not be interpreted as a valid HTML code. Applicants therefore respectfully request that the Office withdraw this objection to the specification.

### Claim Objections

The Office objected to claims 4, 6, 13 and 15 under 37 CFR 1.75(c) for allegedly being in improper dependent form. This objection is moot as these claims are cancelled herein without prejudice or disclaimer.

### Obviousness Rejections

The Office rejected (i) claims 1-3 and 6-10 under 35 USC 103(a) as allegedly unpatentable in view of the rs5637 SNP database submission and Soderlund, and (ii) claims 1-2, 4, 5 and 7-10 under 35 USC 103(a) as allegedly unpatentable in view of the rs1179387 SNP database submission and Soderlund. These rejections are inapplicable to the new claims as the claims are directed in part to identifying a predisposition to obesity, a feature not taught or suggested by the SNP database entries or Soderlund, individually or in combination.

### 35 USC 112, First Paragraph Rejections

The Office rejected claims 1-15 for alleged lack of enablement and alleged lack of written description. These rejections are inapplicable to the new claims. The new claims are directed in part to identifying a predisposition to obesity by detecting a polymorphic variation associated with obesity at position 7328 and/or position 9182 in a nucleotide sequence identical to SEQ ID NO: 1 or in a sequence having minor genetic variance.

The specification provides working examples in support of this subject matter, an *Ex Parte Foreman* factor bearing on enablement addressed in *In re Wands*. For example, the specification teaches the two positions identified in claim 31 were significantly associated with obesity in paragraphs 00173, 00164 and 00165. The association between these SNPs and obesity was determined by studying nucleic acid samples from a significant number of subjects. As the nucleic acid sequences from the group can have baseline genetic variance, the specification provides support for the 1% variation of SEQ ID NO: 1 in claim 31. Thus, the full scope of the claims are supported by working examples in the specification.

In addition to these working examples, the specification also provides clear guidance to the person of ordinary skill in the art for the scope of the claimed subject matter, another factor addressed in *In re Wands*. For example, the specification provides clear guidance for methods of identifying polymorphic variants in nucleic acids from multiple human subjects in paragraphs 0079, 0093 to 00101 and 00151 to 00161.

Given that working examples in the specification demonstrated positions designated in the claims are associated with obesity, the person of ordinary skill in the art could readily identify subjects having a predisposition to obesity by detecting polymorphic variants at these positions as a matter of routine experimentation in view of the specific guidance from the specification. The Court of Appeals for the Federal Circuit has found that when some experimentation may be necessary to produce an invention, routine experimentation does not preclude a finding of enablement (*Monsanto Co. v. Scruggs*, 459 F.3d 1328; 79 USPQ.2d 1813 (Fed. Cir. 2006) and *In re Wands* (supra)). These factors coupled with the high level of skill in the art (i.e., Office action, page 9) leads to the conclusion that any experimentation associated with the full claim scope is routine and not undue. Accordingly, claims 31-40 are fully enabled by the specification and the rejection of claims 1-15 is inapplicable.

The rejection of claims 1-15 for lack of written description also is inapplicable to the new claims. The clear description in the specification for claims 31-40, as described above, demonstrates Applicants had possession of the claimed subject matter before the patent application was filed.

### CONCLUSIONS

Applicants respectfully assert that claims 31-40 are in condition for allowance. The Examiner is requested to call the undersigned representative for any reason that would advance prosecution of the instant patent application.

In the unlikely event a pertinent document is separated from this submission and the Office determines that an extension and/or other relief is required, Applicants petition for any required relief, including extensions of time, and authorize the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 503473**.

Respectfully submitted,

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